TETRA TECH

November 26, 2008

Mr. Perry Gaughan
On-Scene Coordinator
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street SW, 11th Floor
Atlanta, Georgia 30303

Subject: **Partin Oil Spill Site – Oliver Springs, Tennessee**
Technical Direction Document Number (No.) TTEMI-05-002-0007
Contract No. EP-W-05-054 (START III Region 4)
Full Data Validation Report
TestAmerica Analytical Testing Corporation Reports No. NRC1932 and NRC2342
Analytical Parameters: Volatile organic compounds, semivolatile organic compounds, target analyte list metals, gasoline range organics, and extractable petroleum hydrocarbons

Laboratory Report No.	Samples	Field Duplicate Pairs	Field Blanks
NRC1932	SW-01, SW-02, and SW-03	None	TB-01
NRC2342	SW-04 and SW-05	None	TB-02

Dear Mr. Gaughan:

The Tetra Tech EM Inc. Superfund Technical Assessment and Response Team (START) conducted data validation of the analytical results for five surface water samples and two trip blanks that were collected at the Partin Oil Spill site in Oliver Springs, Tennessee, on March 21 and 26, 2008. The samples were analyzed under laboratory Reports No. NRC1932 and NRC2342 by TestAmerica Analytical Testing Corporation of Nashville, Tennessee. Samples in Report No. NRC2342 were analyzed for volatile organic compounds (VOC) by SW-846 Method 8260B, semivolatile organic compounds (SVOC) by SW-846 Method 8270C, target analyte list (TAL) metals by SW-846 Methods 6010B and 7470A, gasoline range organics (GRO) by the Tennessee method, and extractable petroleum hydrocarbons (EPH) by the Tennessee method. Samples in Report No. NRC1932 were analyzed for GRO and EPH only.

Analytical data were evaluated in general accordance with applicable data validation guidance documents, including the following: the U.S. Environmental Protection Agency (EPA) Contract Laboratory Program (CLP) National Functional Guidelines (NFG) for Superfund Organic Methods Data Review (July 2007) and the EPA CLP NFG for Inorganic Data Review (October 2004). The analytical methods used by the fixed laboratory during this project provide guidance on procedures and method acceptance criteria that, in some areas, differ from the NFGs. Where the methods and the NFGs differ, the data validators followed the acceptance criteria in the methods. In addition, if laboratory-derived acceptance criteria were presented in the fixed laboratory data package, then these criteria were used to evaluate the data unless the criteria were considered inadequate.

Data were evaluated based on the following criteria:

- Data Completeness
- Sample Preservation, Sample Receipt, and Holding Times
- Gas Chromatography and Mass Spectrometry (GC/MS) Instrument Performance Checks
- Initial Calibration

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- Continuing Calibration
- Calibration Verification
- Initial and Continuing Calibration Verification
- Field and Laboratory Blanks
- Inductively Coupled Plasma – Interference Check Samples (ICP – ICS)
- System Monitoring Compounds (Surrogates)
- Matrix Spike/Matrix Spike Duplicates (MS/MSD)
- Laboratory Duplicate Sample Analysis
- Spike Sample Analysis
- ICP Serial Dilution
- Laboratory Control Samples (LCS) and Laboratory Control Sample Duplicates (LCSD)
- Dilution by Addition of Solvent
- Dilution by Re-extraction and Reanalysis
- Internal Standards
- Target Analyte Identification
- Analyte Quantitation and Reported Detection Limits
- System Stability and Performance

The following data validation approach was used; it should meet the needs of most data uses and requirements for limits on uncertainty for decision-making using the data. This approach consisted of a review of all of the data, including the raw data. This data validation effort constituted a full validation of the data and involved a 100 percent check against applicable acceptance criteria of all quality control (QC) parameter data, including the parameters listed above.

In addition, all data that pertain to analyte identification, such as chromatograms and mass spectra, were checked completely (100 percent) to evaluate the accuracy of analyte identification. This effort involved an in-depth quantitative check of a fraction of the data; this check involved recalculation of QC results (such as percent recoveries [%R] and relative percent difference [RPD] values) and target analyte results from the raw data. Results were recalculated at a frequency of 10 percent for the data that had been transcribed and generated by hand. Results for data calculated by software were recalculated at varying frequencies and to the extent necessary to confirm the adequacy of the software. If errors or discrepancies were encountered when any data were recalculated and checked, the extent of the data check was expanded, as necessary, to identify the full extent of the problem.

Enclosure 1 presents copies of the sample results sheets from the laboratory data packages, with hand-entered qualifications from the data validation effort. Enclosure 2 presents the same data validation-qualified analytical results in table format. The following sections discuss the data packages and provide an overall assessment of the data. This discussion concentrates on the irregularities associated with the various parameters.

DATA COMPLETENESS

The data packages for laboratory Reports No. NRC1932 and NRC2342 were complete. However, the laboratory inadvertently reported results only to the reporting limit instead of down to the method detection limit. The corrected results forms were submitted and are included in Enclosure 1.

SAMPLE PRESERVATION, SAMPLE RECEIPT, AND HOLDING TIMES

The holding times were met for all sample analyses. The temperatures of the samples in Report No. NRC2342 were within the QC limit of 4 ± 2 degrees Celsius when they arrived at the laboratory.

However, the samples in Report No. NRC1932 arrived at a temperature of 10.1 degrees Celsius. Therefore, the nondetect GRO results for samples SW-01, SW-02, SW-03, and TB-01 were qualified as estimated (flagged "UJ") and the reporting limits may be biased low.

GC/MS INSTRUMENT PERFORMANCE CHECKS

All GC/MS instrument performance checks for the analysis of VOCs and SVOCs met the acceptance criteria.

INITIAL CALIBRATION

The initial calibrations were analyzed at the proper frequencies and concentrations and met all requirements.

CONTINUING CALIBRATION

The continuing calibrations were analyzed at the proper frequencies and concentrations and met all requirements, with the following exceptions. In the VOC analysis, the continuing calibration yielded high percent difference value for methylene chloride that exceeded the QC limit of 40 percent. Therefore, results for methylene chloride were qualified as estimated (flagged "UJ") for all VOC samples.

In the SVOC continuing calibration, percent difference values for 1-methylnaphthalene and pentachlorophenol were high and exceeded the QC limit of 25 percent. Therefore, results for 1-methylnaphthalene and pentachlorophenol were qualified as estimated (flagged "UJ") for all SVOC samples.

CALIBRATION VERIFICATION

The second source calibration verifications for the organic analyses and the Contract-Required Quantitation Limit (CRQL) Check Standard (CRI) for the inorganic analyses were analyzed at the proper frequencies and concentrations and met all requirements, with the following exceptions. In the SVOC calibration verification, the percent recovery value for 3/4-methylphenol was above the QC limit of 75-125 percent. No qualifications were warranted because the recovery was well within the QC limit for the continuing calibration performed on the day the samples were analyzed.

In the metals analysis, recoveries for lead (143 percent) and selenium (154 percent) was biased high and outside the upper QC limit of 130 percent in the CRI analyzed on March 27, 2008. No qualifications were required, because the sample results for lead and selenium were all nondetect.

INITIAL AND CONTINUING CALIBRATION VERIFICATION

The initial and continuing calibration verifications for the inorganic analyses were analyzed at the proper frequencies and concentrations and met all requirements.

FIELD AND LABORATORY BLANKS

Method blanks were free of target analytes with the following exceptions. The metals initial and continuing calibration blanks contained low concentrations of aluminum, antimony, arsenic, calcium, iron, lead, manganese, and other metals. Therefore, the results for aluminum in sample SW-04 and lead in sample SW-05 were elevated to the associated reporting limit and qualified as not detected (flagged "U"). No qualifications were warranted for other metals because sample results were either nondetect or more than ten times the highest associated blank concentrations.

Trip blank samples were analyzed for GRO and VOC. A trace concentration of chloroform was detected in the trip blank sample for Report No. NRC2342. No chloroform was found in the associated field samples; therefore, no qualifications are warranted.

INDUCTIVELY COUPLED PLASMA – INTERFERENCE CHECK SAMPLES (ICP – ICS)

All ICP-ICS data were within the QC limits.

SYSTEM MONITORING COMPOUNDS (SURROGATES)

All surrogate recoveries were within the laboratory-specified control limits.

MATRIX SPIKE/MATRIX SPIKE DUPLICATES

MS/MSD recoveries and RPD results were within the specified control limits, with the following exceptions. In the MS/MSD analyses of VOC sample SW-04, recoveries were biased low and below QC limits for chloroethane (55 and 55 percent, versus a QC limit range of 74 to 151 percent), chloromethane (16 and 18 percent, versus a QC limit range of 33 to 138 percent), dichlorodifluoromethane (2 and 2 percent, versus a QC limit range of 36 to 146 percent), trichlorofluoromethane (54 and 54 percent, versus a QC limit range of 68 to 145 percent), and vinyl chloride (29 and 30 percent, versus a QC limit range of 49 to 156 percent). The results (all nondetect) for chloroethane, chloromethane, dichlorodifluoromethane, trichlorofluoromethane, and vinyl chloride in sample SW-04 were qualified as estimated (flagged "UJ") and the reporting limits may be biased low. Also, in the same MS/MSD analyses, recoveries were biased high and outside QC limits for methylene chloride (194 and 184 percent, versus a QC limit range of 64 to 140 percent) and total xylenes (137 percent for the MS, versus a QC limit range of 80 to 136 percent). No qualifications were applied because neither methylene chloride nor xylenes were detected in sample SW-04.

MS/MSD recoveries were not calculated for calcium, magnesium, potassium, or sodium because the sample concentrations overwhelmed the amount spiked into the sample for the MS/MSD evaluation. No qualifications were required due to this condition.

Due to insufficient sample volume, no MS/MSD analyses were performed for the SVOC and EPH analyses in Report No. NRC2342. LCS recoveries were acceptable; therefore, no qualifications were applied for this data gap.

LABORATORY DUPLICATE SAMPLE ANALYSIS

No laboratory duplicate analyses were performed for this data package.

SPIKE SAMPLE ANALYSIS

No post digestion spikes were performed for this data package.

ICP SERIAL DILUTION

The ICP serial dilution for this data package was performed on a non-project sample and was therefore not evaluated.

LABORATORY CONTROL SAMPLES AND LABORATORY CONTROL SAMPLE DUPLICATES

All LCS and LCSD results were within the QC limits, with the following exceptions. In the VOC analysis, the LCS and/or LCSD recoveries were biased high and outside specified QC limits for acetone

(152 and 158 percent, versus a QC limit range of 62 to 150 percent) and dichlorodifluoromethane (125 percent for the LCSD, versus a QC limit range of 36 to 120 percent) in the LCS/LCSD analyses performed on March 27, 2008. No qualifications were required because the associated results were nondetect in the affected samples.

DILUTION BY ADDITION OF SOLVENT

The EPH extracts for samples SW-01, SW-02, and SW-03 were initially analyzed at 10-fold dilutions. They were then re-analyzed undiluted and the latter results were reported.

DILUTION BY RE-EXTRACTION AND REANALYSIS

No dilution by re-extraction and reanalysis was required for samples in this data package.

INTERNAL STANDARDS

In the VOC and SVOC analyses, the internal standard area counts and retention times in the samples were within QC limits established using the associated continuing calibration standard data.

TARGET ANALYTE IDENTIFICATION

The relative retention times (RRT) of the reported compounds in the VOC, SVOC, GRO, and EPH analyses were within ±0.06 RRT units of the standard RRTs. For each detected analyte in the VOC and SVOC analyses, all ions present in the standard mass spectrum at a relative intensity greater than 10 percent were present in the sample spectrum and agreed within ±20 percent between the standard and sample spectra.

ANALYTE QUANTITATION AND REPORTED DETECTION LIMITS

Sample results were checked for proper dilution factors, volumes, and masses. Sample results and reporting limits were correctly calculated. Sample results below the calibration range, or less than the laboratory reporting limits but greater than the method detection limits, were qualified (flagged “J”) as estimated.

SYSTEM STABILITY AND PERFORMANCE

No signs of degraded instrument performance were observed. Analytical systems were judged to have been within control and stable during the analyses.

OVERALL ASSESSMENT OF DATA

The overall quality of this data package was acceptable. The VOC data were qualified because of continuing calibration and MS/MSD irregularities. The SVOC data were qualified because of continuing calibration irregularities. Some of the GRO data were qualified because of sample preservation (temperature) irregularities. The TAL metals data were qualified because of blank irregularities. Results less than the laboratory reporting limits but greater than the method detection limits, were qualified (flagged “J”) as estimated. The EPH data were reported with no qualification. All data can be used as qualified.

Please call me at (678) 775-3104 if you have any questions regarding this data validation report.

Sincerely,

Jessica Vickers
START III Quality Assurance Manager

Enclosures (2)

cc: Katrina Jones, EPA Project Officer
Darryl Walker, EPA Alternate Project Officer
Angel Reed, Tetra Tech START III Document Control Coordinator

ENCLOSURE 1

FIXED LABORATORY ANALYTICAL RESULTS SHEETS WITH HAND-ENTERED DATA VALIDATION QUALIFIERS FOR TESTAMERICA ANALYTICAL TESTING CORPORATION REPORTS NO. NRC1932 AND NRC2342

(14 Pages)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

Client	Tetra Tech EMI (7797)	Work Order:	NRC1932
	1955 Evergreen Blvd., Building 200, Suite 300	Project Name:	Oliver Springs Oil Well ER (Parten)
	Duluth, GA 30096	Project Number:	Oliver Springs Oil Well ER
Attn	Jessica Vickers	Received:	03/21/08 18:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL		Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NRC1932-01 (SW-01 (Downstream) - Water) Sampled: 03/21/08 13:30										
Extractable Petroleum Hydrocarbons										
Extractable Petroleum Hydrocarbons (EPH)	685		ug/L	80.0	100		1	03/22/08 03:29	TDHE	8033419
Surr: o-Terphenyl (50-150%)	*73 %*						*1*	*03/22/08 03:29*	*TDHE*	*8033419*
Purgeable Petroleum Hydrocarbons										
GRO (C6-C10) TN	ND	U3	ug/L	10.0	100		1	03/21/08 19:13	TN GRO TDEC	8033420
Surr: a,a,a-Trifluorotoluene (46-150%)	*111 %*						*1*	*03/21/08 19:13*	*TN GRO TDEC*	*8033420*

05/14/08

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	1955 Evergreen Blvd., Building 200, Suite 300	Project Name:	Oliver Springs Oil Well ER (Parten)
	Duluth, GA 30096	Project Number:	Oliver Springs Oil Well ER
Attn	Jessica Vickers	Received:	03/21/08 18:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NRC1932-02 (SW-02 (Downstream) - Water) Sampled: 03/21/08 13:30									
Extractable Petroleum Hydrocarbons									
Extractable Petroleum Hydrocarbons (EPH)	663		ug/L	80.0	100	1	03/22/08 04:43	TDHE	8033419
Surr: o-Terphenyl (50-150%)	*78 %*					*1*	*03/22/08 04:43*	*TDHE*	*8033419*
Purgeable Petroleum Hydrocarbons									
GRO (C6-C10) TN	ND	U3	ug/L	10.0	100	1	03/21/08 19:38	TN GRO TDEC	8033420
Surr: a,a,a-Trifluorotoluene (46-150%)	*106 %*					*1*	*03/21/08 19:38*	*TN GRO TDEC*	*8033420*

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Client	Tetra Tech EMI (7797)	Work Order:	NRC1932
	1955 Evergreen Blvd., Building 200, Suite 300	Project Name:	Oliver Springs Oil Well ER (Parten)
	Duluth, GA 30096	Project Number:	Oliver Springs Oil Well ER
Attn	Jessica Vickers	Received:	03/21/08 18:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NRC1932-03 (SW-03 (Upstream) - Water) Sampled: 03/21/08 14:00									
Extractable Petroleum Hydrocarbons									
Extractable Petroleum Hydrocarbons (EPH)	164		ug/L	80.0	100	1	03/22/08 05:57	TDHE	8033419
Surr: o-Terphenyl (50-150%)	*81 %*					*1*	*03/22/08 05:57*	*TDHE*	*8033419*
Purgeable Petroleum Hydrocarbons									
GRO (C6-C10) TN	ND	UJ	ug/L	10.0	100	1	03/21/08 20:02	TN GRO TDEC	8033420
Surr: a,a,a-Trifluorotoluene (46-150%)	*111 %*					*1*	*03/21/08 20:02*	*TN GRO TDEC*	*8033420*

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Client	Tetra Tech EMI (7797)	Work Order:	NRC1932
	1955 Evergreen Blvd., Building 200, Suite 300	Project Name:	Oliver Springs Oil Well ER (Parten)
	Duluth, GA 30096	Project Number:	Oliver Springs Oil Well ER
Attn	Jessica Vickers	Received:	03/21/08 18:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NRC1932-04 (TB-01 (Trip Blank) - Water) Sampled: 03/21/08 13:00									
Purgeable Petroleum Hydrocarbons									
GRO (C6-C10) TN	ND	UJ	ug/L	10.0	100	1	03/21/08 18:49	TN GRO TDEC	8033420
Surr: a,a,a-Trifluorotoluene (46-150%)	*108 %*					*1*	*03/21/08 18:49*	*TN GRO TDEC*	*8033420*

QAU
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2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

Client: Tetra Tech EMI (7797)
1955 Evergreen Blvd., Building 200, Suite 300
Duluth, GA 30096
Attn: Jessica Vickers

Work Order: NRC2342
Project Name: Oliver Springs Oil Well ER
Project Number: Oliver Springs Oil Well ER
Received: 03/27/08 13:21

ANALYTICAL REPORT

Sample ID: NRC2342-01 (SW-04 - Water) Sampled: 03/26/08 17:10

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Total Metals by EPA Method 6010B									
Aluminum	0.100 ~~0.0869~~	U J	mg/L	0.0300	0.100	1	03/27/08 18:21	SW846 6010B	8034271
Antimony	ND		mg/L	0.00700	0.0100	1	03/27/08 18:21	SW846 6010B	8034271
Arsenic	ND		mg/L	0.00500	0.0100	1	03/27/08 18:21	SW846 6010B	8034271
Barium	0.0372		mg/L	0.00300	0.0100	1	03/27/08 18:21	SW846 6010B	8034271
Beryllium	ND	U	mg/L	0.00200	0.00400	1	03/27/08 18:21	SW846 6010B	8034271
Cadmium	ND	U	mg/L	0.000800	0.00100	1	03/27/08 18:21	SW846 6010B	8034271
Calcium	10.7		mg/L	0.100	1.00	1	03/27/08 18:21	SW846 6010B	8034271
Chromium	ND	U	mg/L	0.00200	0.00500	1	03/27/08 18:21	SW846 6010B	8034271
Cobalt	ND		mg/L	0.00500	0.0200	1	03/27/08 18:21	SW846 6010B	8034271
Copper	ND		mg/L	0.00400	0.0100	1	03/27/08 18:21	SW846 6010B	8034271
Iron	0.236		mg/L	0.0420	0.0500	1	03/27/08 18:21	SW846 6010B	8034271
Lead	ND	U	mg/L	0.00250	0.00500	1	03/27/08 18:21	SW846 6010B	8034271
Magnesium	5.29		mg/L	0.100	1.00	1	03/27/08 18:21	SW846 6010B	8034271
Manganese	0.0291		mg/L	0.00200	0.0150	1	03/27/08 18:21	SW846 6010B	8034271
Nickel	ND	U	mg/L	0.00300	0.0100	1	03/27/08 18:21	SW846 6010B	8034271
Potassium	1.03		mg/L	0.200	1.00	1	03/27/08 18:21	SW846 6010B	8034271
Selenium	ND	U	mg/L	0.00950	0.0100	1	03/27/08 18:21	SW846 6010B	8034271
Silver	ND	U	mg/L	0.00300	0.00500	1	03/27/08 18:21	SW846 6010B	8034271
Sodium	4.62		mg/L	0.500	1.00	1	03/27/08 18:21	SW846 6010B	8034271
Thallium	ND	U	mg/L	0.00960	0.0100	1	03/27/08 18:21	SW846 6010B	8034271
Vanadium	ND		mg/L	0.00500	0.0200	1	03/27/08 18:21	SW846 6010B	8034271
Zinc	ND		mg/L	0.0100	0.0500	1	03/27/08 18:21	SW846 6010B	8034271
Mercury by EPA Methods 7470A/7471A									
Mercury	0.000114	J	mg/L	0.000100	0.000200	1	03/28/08 09:02	SW846 7470A	8034273
Volatile Organic Compounds by EPA Method 8260B									
Acetone	ND	U Re	ug/L	25.0	50.0	1	03/27/08 15:12	SW846 8260B	8034281
Benzene	ND		ug/L	0.270	1.00	1	03/27/08 15:12	SW846 8260B	8034281
Bromobenzene	ND		ug/L	0.360	1.00	1	03/27/08 15:12	SW846 8260B	8034281
Bromochloromethane	ND		ug/L	0.400	1.00	1	03/27/08 15:12	SW846 8260B	8034281
Bromodichloromethane	ND		ug/L	0.350	1.00	1	03/27/08 15:12	SW846 8260B	8034281
Bromoform	ND		ug/L	0.430	1.00	1	03/27/08 15:12	SW846 8260B	8034281
Bromomethane	ND		ug/L	0.420	1.00	1	03/27/08 15:12	SW846 8260B	8034281
2-Butanone	ND	Re	ug/L	2.40	50.0	1	03/27/08 15:12	SW846 8260B	8034281
sec-Butylbenzene	ND		ug/L	0.140	1.00	1	03/27/08 15:12	SW846 8260B	8034281
n-Butylbenzene	ND		ug/L	0.280	1.00	1	03/27/08 15:12	SW846 8260B	8034281
tert-Butylbenzene	ND		ug/L	0.330	1.00	1	03/27/08 15:12	SW846 8260B	8034281
Carbon disulfide	ND		ug/L	0.380	1.00	1	03/27/08 15:12	SW846 8260B	8034281
Carbon Tetrachloride	ND		ug/L	0.350	1.00	1	03/27/08 15:12	SW846 8260B	8034281
Chlorobenzene	ND		ug/L	0.180	1.00	1	03/27/08 15:12	SW846 8260B	8034281
Chlorodibromomethane	ND		ug/L	0.280	1.00	1	03/27/08 15:12	SW846 8260B	8034281
Chloroethane	ND	UJ	ug/L	0.450	1.00	1	03/27/08 15:12	SW846 8260B	8034281
Chloroform	ND	U	ug/L	0.280	1.00	1	03/27/08 15:12	SW846 8260B	8034281
Chloromethane	ND	UJ	ug/L	0.380	1.00	1	03/27/08 15:12	SW846 8260B	8034281

QAW
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Client: Tetra Tech EMI (7797)
1955 Evergreen Blvd., Building 200, Suite 300
Duluth, GA 30096
Attn: Jessica Vickers

Work Order: NRC2342
Project Name: Oliver Springs Oil Well ER
Project Number: Oliver Springs Oil Well ER
Received: 03/27/08 13:21

ANALYTICAL REPORT

Sample ID: NRC2342-01 (SW-04 - Water) - cont. Sampled: 03/26/08 17:10

Volatile Organic Compounds by EPA Method 8260B - cont.

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
2-Chlorotoluene	ND	U	ug/L	0.300	1.00	1	03/27/08 15:12	SW846 8260B	8034281
4-Chlorotoluene	ND		ug/L	0.330	1.00	1	03/27/08 15:12	SW846 8260B	8034281
1,2-Dibromo-3-chloropropane	ND		ug/L	0.860	5.00	1	03/27/08 15:12	SW846 8260B	8034281
1,2-Dibromoethane (EDB)	ND		ug/L	0.390	1.00	1	03/27/08 15:12	SW846 8260B	8034281
Dibromomethane	ND		ug/L	0.350	1.00	1	03/27/08 15:12	SW846 8260B	8034281
1,4-Dichlorobenzene	ND		ug/L	0.380	1.00	1	03/27/08 15:12	SW846 8260B	8034281
1,3-Dichlorobenzene	ND		ug/L	0.350	1.00	1	03/27/08 15:12	SW846 8260B	8034281
1,2-Dichlorobenzene	ND		ug/L	0.500	1.00	1	03/27/08 15:12	SW846 8260B	8034281
Dichlorodifluoromethane	ND	UJ	ug/L	0.460	1.00	1	03/27/08 15:12	SW846 8260B	8034281
1,1-Dichloroethane	ND	U	ug/L	0.540	1.00	1	03/27/08 15:12	SW846 8260B	8034281
1,2-Dichloroethane	ND		ug/L	0.370	1.00	1	03/27/08 15:12	SW846 8260B	8034281
cis-1,2-Dichloroethene	ND		ug/L	0.390	1.00	1	03/27/08 15:12	SW846 8260B	8034281
1,1-Dichloroethene	ND		ug/L	0.340	1.00	1	03/27/08 15:12	SW846 8260B	8034281
trans-1,2-Dichloroethene	ND		ug/L	0.470	1.00	1	03/27/08 15:12	SW846 8260B	8034281
1,3-Dichloropropane	ND		ug/L	0.290	1.00	1	03/27/08 15:12	SW846 8260B	8034281
1,2-Dichloropropane	ND		ug/L	0.320	1.00	1	03/27/08 15:12	SW846 8260B	8034281
2,2-Dichloropropane	ND		ug/L	0.420	1.00	1	03/27/08 15:12	SW846 8260B	8034281
cis-1,3-Dichloropropene	ND		ug/L	0.290	1.00	1	03/27/08 15:12	SW846 8260B	8034281
trans-1,3-Dichloropropene	ND		ug/L	0.330	1.00	1	03/27/08 15:12	SW846 8260B	8034281
1,1-Dichloropropene	ND		ug/L	0.310	1.00	1	03/27/08 15:12	SW846 8260B	8034281
Ethylbenzene	ND		ug/L	0.240	1.00	1	03/27/08 15:12	SW846 8260B	8034281
Hexachlorobutadiene	ND		ug/L	0.910	1.00	1	03/27/08 15:12	SW846 8260B	8034281
2-Hexanone	ND		ug/L	16.7	50.0	1	03/27/08 15:12	SW846 8260B	8034281
Isopropylbenzene	ND		ug/L	0.300	1.00	1	03/27/08 15:12	SW846 8260B	8034281
p-Isopropyltoluene	ND		ug/L	0.220	1.00	1	03/27/08 15:12	SW846 8260B	8034281
Methyl tert-Butyl Ether	ND		ug/L	0.420	1.00	1	03/27/08 15:12	SW846 8260B	8034281
Methylene Chloride	ND	UJ	ug/L	0.830	5.00	1	03/27/08 15:12	SW846 8260B	8034281
4-Methyl-2-pentanone	ND	U	ug/L	3.49	10.0	1	03/27/08 15:12	SW846 8260B	8034281
Naphthalene	ND		ug/L	0.540	5.00	1	03/27/08 15:12	SW846 8260B	8034281
n-Propylbenzene	ND		ug/L	0.290	1.00	1	03/27/08 15:12	SW846 8260B	8034281
Styrene	ND		ug/L	0.330	1.00	1	03/27/08 15:12	SW846 8260B	8034281
1,1,1,2-Tetrachloroethane	ND		ug/L	0.290	1.00	1	03/27/08 15:12	SW846 8260B	8034281
1,1,2,2-Tetrachloroethane	ND		ug/L	0.290	1.00	1	03/27/08 15:12	SW846 8260B	8034281
Tetrachloroethene	ND		ug/L	0.230	1.00	1	03/27/08 15:12	SW846 8260B	8034281
Toluene	ND		ug/L	0.280	1.00	1	03/27/08 15:12	SW846 8260B	8034281
1,2,3-Trichlorobenzene	ND		ug/L	0.940	1.00	1	03/27/08 15:12	SW846 8260B	8034281
1,2,4-Trichlorobenzene	ND		ug/L	0.500	1.00	1	03/27/08 15:12	SW846 8260B	8034281
1,1,2-Trichloroethane	ND		ug/L	0.400	1.00	1	03/27/08 15:12	SW846 8260B	8034281
1,1,1-Trichloroethane	ND		ug/L	0.370	1.00	1	03/27/08 15:12	SW846 8260B	8034281
Trichloroethene	ND		ug/L	0.230	1.00	1	03/27/08 15:12	SW846 8260B	8034281
Trichlorofluoromethane	ND	UJ	ug/L	0.350	1.00	1	03/27/08 15:12	SW846 8260B	8034281
1,2,3-Trichloropropane	ND	U	ug/L	0.290	1.00	1	03/27/08 15:12	SW846 8260B	8034281
1,3,5-Trimethylbenzene	ND		ug/L	0.160	1.00	1	03/27/08 15:12	SW846 8260B	8034281
1,2,4-Trimethylbenzene	ND		ug/L	0.170	1.00	1	03/27/08 15:12	SW846 8260B	8034281
Vinyl chloride	ND	UJ	ug/L	0.290	1.00	1	03/27/08 15:12	SW846 8260B	8034281

06/14/08

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

Client: Tetra Tech EMI (7797)
1955 Evergreen Blvd., Building 200, Suite 300
Duluth, GA 30096
Attn: Jessica Vickers

Work Order: NRC2342
Project Name: Oliver Springs Oil Well ER
Project Number: Oliver Springs Oil Well ER
Received: 03/27/08 13:21

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NRC2342-01 (SW-04 - Water) - cont. Sampled: 03/26/08 17:10									
Volatile Organic Compounds by EPA Method 8260B - cont.									
Xylenes, total	ND	U	ug/L	0.860	3.00	1	03/27/08 15:12	SW846 8260B	8034281
Surr: 1,2-Dichloroethane-d4 (60-140%)	*96 %*					*1*	*03/27/08 15:12*	*SW846 8260B*	*8034281*
Surr: Dibromofluoromethane (75-124%)	*86 %*					*1*	*03/27/08 15:12*	*SW846 8260B*	*8034281*
Surr: Toluene-d8 (78-121%)	*98 %*					*1*	*03/27/08 15:12*	*SW846 8260B*	*8034281*
Surr: 4-Bromofluorobenzene (79-124%)	*99 %*					*1*	*03/27/08 15:12*	*SW846 8260B*	*8034281*
Semivolatile Organic Compounds by EPA Method 8270C									
Acenaphthene	ND	U	ug/L	0.971	9.71	1	03/27/08 18:09	SW846 8270C	8034276
Acenaphthylene	ND		ug/L	0.971	9.71	1	03/27/08 18:09	SW846 8270C	8034276
Anthracene	ND		ug/L	0.971	9.71	1	03/27/08 18:09	SW846 8270C	8034276
Benzo (a) anthracene	ND		ug/L	0.971	9.71	1	03/27/08 18:09	SW846 8270C	8034276
Benzo (a) pyrene	ND		ug/L	0.971	9.71	1	03/27/08 18:09	SW846 8270C	8034276
Benzo (b) fluoranthene	ND		ug/L	0.971	9.71	1	03/27/08 18:09	SW846 8270C	8034276
Benzo (g,h,i) perylene	ND		ug/L	0.971	9.71	1	03/27/08 18:09	SW846 8270C	8034276
Benzo (k) fluoranthene	ND		ug/L	0.971	9.71	1	03/27/08 18:09	SW846 8270C	8034276
4-Bromophenyl phenyl ether	ND		ug/L	3.20	9.71	1	03/27/08 18:09	SW846 8270C	8034276
Butyl benzyl phthalate	ND		ug/L	3.20	9.71	1	03/27/08 18:09	SW846 8270C	8034276
Carbazole	ND		ug/L	3.20	9.71	1	03/27/08 18:09	SW846 8270C	8034276
4-Chloro-3-methylphenol	ND		ug/L	4.37	9.71	1	03/27/08 18:09	SW846 8270C	8034276
4-Chloroaniline	ND		ug/L	4.37	9.71	1	03/27/08 18:09	SW846 8270C	8034276
Bis(2-chloroethoxy)methane	ND		ug/L	4.08	9.71	1	03/27/08 18:09	SW846 8270C	8034276
Bis(2-chloroethyl)ether	ND		ug/L	4.56	9.71	1	03/27/08 18:09	SW846 8270C	8034276
Bis(2-chloroisopropyl)ether	ND		ug/L	4.08	9.71	1	03/27/08 18:09	SW846 8270C	8034276
2-Chloronaphthalene	ND		ug/L	3.40	9.71	1	03/27/08 18:09	SW846 8270C	8034276
2-Chlorophenol	ND		ug/L	3.98	9.71	1	03/27/08 18:09	SW846 8270C	8034276
4-Chlorophenyl phenyl ether	ND		ug/L	2.52	9.71	1	03/27/08 18:09	SW846 8270C	8034276
Chrysene	ND		ug/L	0.971	9.71	1	03/27/08 18:09	SW846 8270C	8034276
Dibenz (a,h) anthracene	ND		ug/L	0.971	9.71	1	03/27/08 18:09	SW846 8270C	8034276
Dibenzofuran	ND		ug/L	2.82	9.71	1	03/27/08 18:09	SW846 8270C	8034276
Di-n-butyl phthalate	ND		ug/L	3.20	9.71	1	03/27/08 18:09	SW846 8270C	8034276
1,4-Dichlorobenzene	ND		ug/L	5.63	9.71	1	03/27/08 18:09	SW846 8270C	8034276
1,2-Dichlorobenzene	ND		ug/L	6.12	9.71	1	03/27/08 18:09	SW846 8270C	8034276
1,3-Dichlorobenzene	ND		ug/L	5.83	9.71	1	03/27/08 18:09	SW846 8270C	8034276
3,3-Dichlorobenzidine	ND		ug/L	1.94	9.71	1	03/27/08 18:09	SW846 8270C	8034276
2,4-Dichlorophenol	ND		ug/L	3.20	9.71	1	03/27/08 18:09	SW846 8270C	8034276
Diethyl phthalate	ND		ug/L	3.20	9.71	1	03/27/08 18:09	SW846 8270C	8034276
2,4-Dimethylphenol	ND		ug/L	3.98	9.71	1	03/27/08 18:09	SW846 8270C	8034276
Dimethyl phthalate	ND		ug/L	3.20	9.71	1	03/27/08 18:09	SW846 8270C	8034276
4,6-Dinitro-2-methylphenol	ND		ug/L	3.20	24.3	1	03/27/08 18:09	SW846 8270C	8034276
2,4-Dinitrophenol	ND		ug/L	3.30	24.3	1	03/27/08 18:09	SW846 8270C	8034276
2,6-Dinitrotoluene	ND		ug/L	2.14	9.71	1	03/27/08 18:09	SW846 8270C	8034276
2,4-Dinitrotoluene	ND		ug/L	3.20	9.71	1	03/27/08 18:09	SW846 8270C	8034276
Di-n-octyl phthalate	ND		ug/L	3.20	9.71	1	03/27/08 18:09	SW846 8270C	8034276
Bis(2-ethylhexyl)phthalate	ND		ug/L	3.20	9.71	1	03/27/08 18:09	SW846 8270C	8034276

06/14/08

Client	Tetra Tech EMI (7797)	Work Order:	NRC2342
	1955 Evergreen Blvd., Building 200, Suite 300	Project Name:	Oliver Springs Oil Well ER
	Duluth, GA 30096	Project Number:	Oliver Springs Oil Well ER
Attn	Jessica Vickers	Received:	03/27/08 13:21

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NRC2342-01 (SW-04 - Water) - cont. Sampled: 03/26/08 17:10									
Semivolatile Organic Compounds by EPA Method 8270C - cont.									
Fluoranthene	ND	U	ug/L	0.971	9.71	1	03/27/08 18:09	SW846 8270C	8034276
Fluorene	ND		ug/L	0.971	9.71	1	03/27/08 18:09	SW846 8270C	8034276
Hexachlorobenzene	ND		ug/L	2.91	9.71	1	03/27/08 18:09	SW846 8270C	8034276
Hexachlorobutadiene	ND		ug/L	4.95	9.71	1	03/27/08 18:09	SW846 8270C	8034276
Hexachlorocyclopentadiene	ND		ug/L	3.20	9.71	1	03/27/08 18:09	SW846 8270C	8034276
Hexachloroethane	ND		ug/L	5.73	9.71	1	03/27/08 18:09	SW846 8270C	8034276
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.971	9.71	1	03/27/08 18:09	SW846 8270C	8034276
Isophorone	ND		ug/L	4.56	9.71	1	03/27/08 18:09	SW846 8270C	8034276
2-Methylnaphthalene	ND		ug/L	0.971	9.71	1	03/27/08 18:09	SW846 8270C	8034276
2-Methylphenol	ND		ug/L	3.40	9.71	1	03/27/08 18:09	SW846 8270C	8034276
3/4-Methylphenol	ND		ug/L	4.47	9.71	1	03/27/08 18:09	SW846 8270C	8034276
Naphthalene	ND		ug/L	0.971	9.71	1	03/27/08 18:09	SW846 8270C	8034276
3-Nitroaniline	ND		ug/L	3.20	24.3	1	03/27/08 18:09	SW846 8270C	8034276
2-Nitroaniline	ND		ug/L	3.20	24.3	1	03/27/08 18:09	SW846 8270C	8034276
4-Nitroaniline	ND		ug/L	3.20	24.3	1	03/27/08 18:09	SW846 8270C	8034276
Nitrobenzene	ND		ug/L	3.40	9.71	1	03/27/08 18:09	SW846 8270C	8034276
4-Nitrophenol	ND		ug/L	4.17	24.3	1	03/27/08 18:09	SW846 8270C	8034276
2-Nitrophenol	ND		ug/L	3.11	9.71	1	03/27/08 18:09	SW846 8270C	8034276
N-Nitrosodiphenylamine	ND		ug/L	3.20	9.71	1	03/27/08 18:09	SW846 8270C	8034276
N-Nitrosodi-n-propylamine	ND		ug/L	3.79	9.71	1	03/27/08 18:09	SW846 8270C	8034276
Pentachlorophenol	ND	UJ	ug/L	3.20	24.3	1	03/27/08 18:09	SW846 8270C	8034276
Phenanthrene	ND	U	ug/L	0.971	9.71	1	03/27/08 18:09	SW846 8270C	8034276
Phenol	ND		ug/L	3.20	9.71	1	03/27/08 18:09	SW846 8270C	8034276
Pyrene	ND		ug/L	0.971	9.71	1	03/27/08 18:09	SW846 8270C	8034276
1,2,4-Trichlorobenzene	ND		ug/L	4.17	9.71	1	03/27/08 18:09	SW846 8270C	8034276
1-Methylnaphthalene	ND	UJ	ug/L	0.971	9.71	1	03/27/08 18:09	SW846 8270C	8034276
2,4,6-Trichlorophenol	ND	U	ug/L	3.20	9.71	1	03/27/08 18:09	SW846 8270C	8034276
2,4,5-Trichlorophenol	ND	U	ug/L	3.20	24.3	1	03/27/08 18:09	SW846 8270C	8034276
Surr: Terphenyl-d14 (21-123%)	*63 %*					*1*	*03/27/08 18:09*	*SW846 8270C*	*8034276*
Surr: 2,4,6-Tribromophenol (23-129%)	*73 %*					*1*	*03/27/08 18:09*	*SW846 8270C*	*8034276*
Surr: Phenol-d5 (10-100%)	*23 %*					*1*	*03/27/08 18:09*	*SW846 8270C*	*8034276*
Surr: 2-Fluorobiphenyl (34-108%)	*66 %*					*1*	*03/27/08 18:09*	*SW846 8270C*	*8034276*
Surr: 2-Fluorophenol (10-100%)	*38 %*					*1*	*03/27/08 18:09*	*SW846 8270C*	*8034276*
Surr: Nitrobenzene-d5 (29-116%)	*59 %*					*1*	*03/27/08 18:09*	*SW846 8270C*	*8034276*
Extractable Petroleum Hydrocarbons									
Extractable Petroleum Hydrocarbons (EPH)	189		ug/L	80.0	100	1	03/28/08 00:07	TDHE	8034272
Surr: o-Terphenyl (50-150%)	*84 %*					*1*	*03/28/08 00:07*	*TDHE*	*8034272*
Purgeable Petroleum Hydrocarbons									
GRO (C6-C10) TN	ND	U	ug/L	10.0	100	1	03/27/08 14:13	TN GRO TDEC	8034270
Surr: a,a,a-Trifluorotoluene (46-150%)	*118 %*					*1*	*03/27/08 14:13*	*TN GRO TDEC*	*8034270*

05/14/08

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

Client: Tetra Tech EMI (7797)
1955 Evergreen Blvd., Building 200, Suite 300
Duluth, GA 30096
Attn: Jessica Vickers

Work Order: NRC2342
Project Name: Oliver Springs Oil Well ER
Project Number: Oliver Springs Oil Well ER
Received: 03/27/08 13:21

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NRC2342-02 (SW-05 - Water) Sampled: 03/26/08 17:50									
Total Metals by EPA Method 6010B									
Aluminum	0.143		mg/L	0.0300	0.100	1	03/27/08 18:52	SW846 6010B	8034271
Antimony	ND	U	mg/L	0.00700	0.0100	1	03/27/08 18:52	SW846 6010B	8034271
Arsenic	ND	U	mg/L	0.00500	0.0100	1	03/27/08 18:52	SW846 6010B	8034271
Barium	0.0387		mg/L	0.00300	0.0100	1	03/27/08 18:52	SW846 6010B	8034271
Beryllium	ND	U	mg/L	0.00200	0.00400	1	03/27/08 18:52	SW846 6010B	8034271
Cadmium	ND	U	mg/L	0.000800	0.00100	1	03/27/08 18:52	SW846 6010B	8034271
Calcium	11.1		mg/L	0.100	1.00	1	03/27/08 18:52	SW846 6010B	8034271
Chromium	ND	U	mg/L	0.00200	0.00500	1	03/27/08 18:52	SW846 6010B	8034271
Cobalt	ND		mg/L	0.00500	0.0200	1	03/27/08 18:52	SW846 6010B	8034271
Copper	ND		mg/L	0.00400	0.0100	1	03/27/08 18:52	SW846 6010B	8034271
Iron	0.236		mg/L	0.0420	0.0500	1	03/27/08 18:52	SW846 6010B	8034271
Lead	~~0.00500~~ 0.00250	U	mg/L	0.00250	0.00500	1	03/27/08 18:52	SW846 6010B	8034271
Magnesium	5.26		mg/L	0.100	1.00	1	03/27/08 18:52	SW846 6010B	8034271
Manganese	0.0154		mg/L	0.00200	0.0150	1	03/27/08 18:52	SW846 6010B	8034271
Nickel	ND	U	mg/L	0.00300	0.0100	1	03/27/08 18:52	SW846 6010B	8034271
Potassium	1.05		mg/L	0.200	1.00	1	03/27/08 18:52	SW846 6010B	8034271
Selenium	ND	U	mg/L	0.00950	0.0100	1	03/27/08 18:52	SW846 6010B	8034271
Silver	ND	U	mg/L	0.00300	0.00500	1	03/27/08 18:52	SW846 6010B	8034271
Sodium	5.00		mg/L	0.500	1.00	1	03/27/08 18:52	SW846 6010B	8034271
Thallium	ND	U	mg/L	0.00960	0.0100	1	03/27/08 18:52	SW846 6010B	8034271
Vanadium	ND		mg/L	0.00500	0.0200	1	03/27/08 18:52	SW846 6010B	8034271
Zinc	ND		mg/L	0.0100	0.0500	1	03/27/08 18:52	SW846 6010B	8034271
Mercury by EPA Methods 7470A/7471A									
Mercury	ND	U	mg/L	0.000100	0.000200	1	03/28/08 09:09	SW846 7470A	8034273
Volatile Organic Compounds by EPA Method 8260B									
Acetone	ND	UR2	ug/L	25.0	50.0	1	03/27/08 15:36	SW846 8260B	8034281
Benzene	ND		ug/L	0.270	1.00	1	03/27/08 15:36	SW846 8260B	8034281
Bromobenzene	ND		ug/L	0.360	1.00	1	03/27/08 15:36	SW846 8260B	8034281
Bromochloromethane	ND		ug/L	0.400	1.00	1	03/27/08 15:36	SW846 8260B	8034281
Bromodichloromethane	ND		ug/L	0.350	1.00	1	03/27/08 15:36	SW846 8260B	8034281
Bromoform	ND		ug/L	0.430	1.00	1	03/27/08 15:36	SW846 8260B	8034281
Bromomethane	ND	R2	ug/L	0.420	1.00	1	03/27/08 15:36	SW846 8260B	8034281
2-Butanone	ND		ug/L	2.40	50.0	1	03/27/08 15:36	SW846 8260B	8034281
sec-Butylbenzene	ND		ug/L	0.140	1.00	1	03/27/08 15:36	SW846 8260B	8034281
n-Butylbenzene	ND		ug/L	0.280	1.00	1	03/27/08 15:36	SW846 8260B	8034281
tert-Butylbenzene	ND		ug/L	0.330	1.00	1	03/27/08 15:36	SW846 8260B	8034281
Carbon disulfide	ND		ug/L	0.380	1.00	1	03/27/08 15:36	SW846 8260B	8034281
Carbon Tetrachloride	ND		ug/L	0.350	1.00	1	03/27/08 15:36	SW846 8260B	8034281
Chlorobenzene	ND		ug/L	0.180	1.00	1	03/27/08 15:36	SW846 8260B	8034281
Chlorodibromomethane	ND		ug/L	0.280	1.00	1	03/27/08 15:36	SW846 8260B	8034281
Chloroethane	ND		ug/L	0.450	1.00	1	03/27/08 15:36	SW846 8260B	8034281
Chloroform	ND		ug/L	0.280	1.00	1	03/27/08 15:36	SW846 8260B	8034281
Chloromethane	ND		ug/L	0.380	1.00	1	03/27/08 15:36	SW846 8260B	8034281

gaw
06/14/08

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

Client: Tetra Tech EMI (7797)
1955 Evergreen Blvd., Building 200, Suite 300
Duluth, GA 30096
Attn: Jessica Vickers

Work Order: NRC2342
Project Name: Oliver Springs Oil Well ER
Project Number: Oliver Springs Oil Well ER
Received: 03/27/08 13:21

ANALYTICAL REPORT

Sample ID: NRC2342-02 (SW-05 - Water) - cont. Sampled: 03/26/08 17:50

Volatile Organic Compounds by EPA Method 8260B - cont.

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
2-Chlorotoluene	ND	U	ug/L	0.300	1.00	1	03/27/08 15:36	SW846 8260B	8034281
4-Chlorotoluene	ND		ug/L	0.330	1.00	1	03/27/08 15:36	SW846 8260B	8034281
1,2-Dibromo-3-chloropropane	ND		ug/L	0.860	5.00	1	03/27/08 15:36	SW846 8260B	8034281
1,2-Dibromoethane (EDB)	ND		ug/L	0.390	1.00	1	03/27/08 15:36	SW846 8260B	8034281
Dibromomethane	ND		ug/L	0.350	1.00	1	03/27/08 15:36	SW846 8260B	8034281
1,4-Dichlorobenzene	ND		ug/L	0.380	1.00	1	03/27/08 15:36	SW846 8260B	8034281
1,3-Dichlorobenzene	ND		ug/L	0.350	1.00	1	03/27/08 15:36	SW846 8260B	8034281
1,2-Dichlorobenzene	ND		ug/L	0.500	1.00	1	03/27/08 15:36	SW846 8260B	8034281
Dichlorodifluoromethane	ND		ug/L	0.460	1.00	1	03/27/08 15:36	SW846 8260B	8034281
1,1-Dichloroethane	ND		ug/L	0.540	1.00	1	03/27/08 15:36	SW846 8260B	8034281
1,2-Dichloroethane	ND		ug/L	0.370	1.00	1	03/27/08 15:36	SW846 8260B	8034281
cis-1,2-Dichloroethene	ND		ug/L	0.390	1.00	1	03/27/08 15:36	SW846 8260B	8034281
1,1-Dichloroethene	ND		ug/L	0.340	1.00	1	03/27/08 15:36	SW846 8260B	8034281
trans-1,2-Dichloroethene	ND		ug/L	0.470	1.00	1	03/27/08 15:36	SW846 8260B	8034281
1,3-Dichloropropane	ND		ug/L	0.290	1.00	1	03/27/08 15:36	SW846 8260B	8034281
1,2-Dichloropropane	ND		ug/L	0.320	1.00	1	03/27/08 15:36	SW846 8260B	8034281
2,2-Dichloropropane	ND		ug/L	0.420	1.00	1	03/27/08 15:36	SW846 8260B	8034281
cis-1,3-Dichloropropene	ND		ug/L	0.290	1.00	1	03/27/08 15:36	SW846 8260B	8034281
trans-1,3-Dichloropropene	ND		ug/L	0.330	1.00	1	03/27/08 15:36	SW846 8260B	8034281
1,1-Dichloropropene	ND		ug/L	0.310	1.00	1	03/27/08 15:36	SW846 8260B	8034281
Ethylbenzene	ND		ug/L	0.240	1.00	1	03/27/08 15:36	SW846 8260B	8034281
Hexachlorobutadiene	ND		ug/L	0.910	1.00	1	03/27/08 15:36	SW846 8260B	8034281
2-Hexanone	ND		ug/L	16.7	50.0	1	03/27/08 15:36	SW846 8260B	8034281
Isopropylbenzene	ND		ug/L	0.300	1.00	1	03/27/08 15:36	SW846 8260B	8034281
p-Isopropyltoluene	ND		ug/L	0.220	1.00	1	03/27/08 15:36	SW846 8260B	8034281
Methyl tert-Butyl Ether	ND		ug/L	0.420	1.00	1	03/27/08 15:36	SW846 8260B	8034281
Methylene Chloride	ND	UJ	ug/L	0.830	5.00	1	03/27/08 15:36	SW846 8260B	8034281
4-Methyl-2-pentanone	ND	U	ug/L	3.49	10.0	1	03/27/08 15:36	SW846 8260B	8034281
Naphthalene	ND		ug/L	0.540	5.00	1	03/27/08 15:36	SW846 8260B	8034281
n-Propylbenzene	ND		ug/L	0.290	1.00	1	03/27/08 15:36	SW846 8260B	8034281
Styrene	ND		ug/L	0.330	1.00	1	03/27/08 15:36	SW846 8260B	8034281
1,1,1,2-Tetrachloroethane	ND		ug/L	0.290	1.00	1	03/27/08 15:36	SW846 8260B	8034281
1,1,2,2-Tetrachloroethane	ND		ug/L	0.290	1.00	1	03/27/08 15:36	SW846 8260B	8034281
Tetrachloroethene	ND		ug/L	0.230	1.00	1	03/27/08 15:36	SW846 8260B	8034281
Toluene	ND		ug/L	0.280	1.00	1	03/27/08 15:36	SW846 8260B	8034281
1,2,3-Trichlorobenzene	ND		ug/L	0.940	1.00	1	03/27/08 15:36	SW846 8260B	8034281
1,2,4-Trichlorobenzene	ND		ug/L	0.500	1.00	1	03/27/08 15:36	SW846 8260B	8034281
1,1,2-Trichloroethane	ND		ug/L	0.400	1.00	1	03/27/08 15:36	SW846 8260B	8034281
1,1,1-Trichloroethane	ND		ug/L	0.370	1.00	1	03/27/08 15:36	SW846 8260B	8034281
Trichloroethene	ND		ug/L	0.230	1.00	1	03/27/08 15:36	SW846 8260B	8034281
Trichlorofluoromethane	ND		ug/L	0.350	1.00	1	03/27/08 15:36	SW846 8260B	8034281
1,2,3-Trichloropropane	ND		ug/L	0.290	1.00	1	03/27/08 15:36	SW846 8260B	8034281
1,3,5-Trimethylbenzene	ND		ug/L	0.160	1.00	1	03/27/08 15:36	SW846 8260B	8034281
1,2,4-Trimethylbenzene	ND		ug/L	0.170	1.00	1	03/27/08 15:36	SW846 8260B	8034281
Vinyl chloride	ND		ug/L	0.290	1.00	1	03/27/08 15:36	SW846 8260B	8034281

qaw
05/14/08

Client	Tetra Tech EM1 (7797)	Work Order:	NRC2342
	1955 Evergreen Blvd., Building 200, Suite 300	Project Name:	Oliver Springs Oil Well ER
	Duluth, GA 30096	Project Number:	Oliver Springs Oil Well ER
Attn	Jessica Vickers	Received:	03/27/08 13:21

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NRC2342-02 (SW-05 - Water) - cont. Sampled: 03/26/08 17:50									
Volatile Organic Compounds by EPA Method 8260B - cont.									
Xylenes, total	ND	U	ug/L	0.860	3.00	1	03/27/08 15:36	SW846 8260B	8034281
Surr: 1,2-Dichloroethane-d4 (60-140%)	*96 %*					*1*	*03/27/08 15:36*	*SW846 8260B*	*8034281*
Surr: Dibromofluoromethane (75-124%)	*87 %*					*1*	*03/27/08 15:36*	*SW846 8260B*	*8034281*
Surr: Toluene-d8 (78-121%)	*98 %*					*1*	*03/27/08 15:36*	*SW846 8260B*	*8034281*
Surr: 4-Bromofluorobenzene (79-124%)	*97 %*					*1*	*03/27/08 15:36*	*SW846 8260B*	*8034281*
Semivolatile Organic Compounds by EPA Method 8270C									
Acenaphthene	ND	U	ug/L	0.971	9.71	1	03/27/08 18:36	SW846 8270C	8034276
Acenaphthylene	ND		ug/L	0.971	9.71	1	03/27/08 18:36	SW846 8270C	8034276
Anthracene	ND		ug/L	0.971	9.71	1	03/27/08 18:36	SW846 8270C	8034276
Benzo (a) anthracene	ND		ug/L	0.971	9.71	1	03/27/08 18:36	SW846 8270C	8034276
Benzo (a) pyrene	ND		ug/L	0.971	9.71	1	03/27/08 18:36	SW846 8270C	8034276
Benzo (b) fluoranthene	ND		ug/L	0.971	9.71	1	03/27/08 18:36	SW846 8270C	8034276
Benzo (g,h,i) perylene	ND		ug/L	0.971	9.71	1	03/27/08 18:36	SW846 8270C	8034276
Benzo (k) fluoranthene	ND		ug/L	0.971	9.71	1	03/27/08 18:36	SW846 8270C	8034276
4-Bromophenyl phenyl ether	ND		ug/L	3.20	9.71	1	03/27/08 18:36	SW846 8270C	8034276
Butyl benzyl phthalate	ND		ug/L	3.20	9.71	1	03/27/08 18:36	SW846 8270C	8034276
Carbazole	ND		ug/L	3.20	9.71	1	03/27/08 18:36	SW846 8270C	8034276
4-Chloro-3-methylphenol	ND		ug/L	4.37	9.71	1	03/27/08 18:36	SW846 8270C	8034276
4-Chloroaniline	ND		ug/L	4.37	9.71	1	03/27/08 18:36	SW846 8270C	8034276
Bis(2-chloroethoxy)methane	ND		ug/L	4.08	9.71	1	03/27/08 18:36	SW846 8270C	8034276
Bis(2-chloroethyl)ether	ND		ug/L	4.56	9.71	1	03/27/08 18:36	SW846 8270C	8034276
Bis(2-chloroisopropyl)ether	ND		ug/L	4.08	9.71	1	03/27/08 18:36	SW846 8270C	8034276
2-Chloronaphthalene	ND		ug/L	3.40	9.71	1	03/27/08 18:36	SW846 8270C	8034276
2-Chlorophenol	ND		ug/L	3.98	9.71	1	03/27/08 18:36	SW846 8270C	8034276
4-Chlorophenyl phenyl ether	ND		ug/L	2.52	9.71	1	03/27/08 18:36	SW846 8270C	8034276
Chrysene	ND		ug/L	0.971	9.71	1	03/27/08 18:36	SW846 8270C	8034276
Dibenz (a,h) anthracene	ND		ug/L	0.971	9.71	1	03/27/08 18:36	SW846 8270C	8034276
Dibenzofuran	ND		ug/L	2.82	9.71	1	03/27/08 18:36	SW846 8270C	8034276
Di-n-butyl phthalate	ND		ug/L	3.20	9.71	1	03/27/08 18:36	SW846 8270C	8034276
1,4-Dichlorobenzene	ND		ug/L	5.63	9.71	1	03/27/08 18:36	SW846 8270C	8034276
1,2-Dichlorobenzene	ND		ug/L	6.12	9.71	1	03/27/08 18:36	SW846 8270C	8034276
1,3-Dichlorobenzene	ND		ug/L	5.83	9.71	1	03/27/08 18:36	SW846 8270C	8034276
3,3-Dichlorobenzidine	ND		ug/L	1.94	9.71	1	03/27/08 18:36	SW846 8270C	8034276
2,4-Dichlorophenol	ND		ug/L	3.20	9.71	1	03/27/08 18:36	SW846 8270C	8034276
Diethyl phthalate	ND		ug/L	3.20	9.71	1	03/27/08 18:36	SW846 8270C	8034276
2,4-Dimethylphenol	ND		ug/L	3.98	9.71	1	03/27/08 18:36	SW846 8270C	8034276
Dimethyl phthalate	ND		ug/L	3.20	9.71	1	03/27/08 18:36	SW846 8270C	8034276
4,6-Dinitro-2-methylphenol	ND		ug/L	3.20	24.3	1	03/27/08 18:36	SW846 8270C	8034276
2,4-Dinitrophenol	ND		ug/L	3.30	24.3	1	03/27/08 18:36	SW846 8270C	8034276
2,6-Dinitrotoluene	ND		ug/L	2.14	9.71	1	03/27/08 18:36	SW846 8270C	8034276
2,4-Dinitrotoluene	ND		ug/L	3.20	9.71	1	03/27/08 18:36	SW846 8270C	8034276
Di-n-octyl phthalate	ND		ug/L	3.20	9.71	1	03/27/08 18:36	SW846 8270C	8034276
Bis(2-ethylhexyl)phthalate	ND		ug/L	3.20	9.71	1	03/27/08 18:36	SW846 8270C	8034276

05/14/08

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

Client: Tetra Tech EMI (7797)
1955 Evergreen Blvd., Building 200, Suite 300
Duluth, GA 30096
Attn: Jessica Vickers

Work Order: NRC2342
Project Name: Oliver Springs Oil Well ER
Project Number: Oliver Springs Oil Well ER
Received: 03/27/08 13:21

ANALYTICAL REPORT

Sample ID: NRC2342-02 (SW-05 - Water) - cont. Sampled: 03/26/08 17:50

Semivolatile Organic Compounds by EPA Method 8270C - cont.

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Fluoranthene	ND	U	ug/L	0.971	9.71	1	03/27/08 18:36	SW846 8270C	8034276
Fluorene	ND		ug/L	0.971	9.71	1	03/27/08 18:36	SW846 8270C	8034276
Hexachlorobenzene	ND		ug/L	2.91	9.71	1	03/27/08 18:36	SW846 8270C	8034276
Hexachlorobutadiene	ND		ug/L	4.95	9.71	1	03/27/08 18:36	SW846 8270C	8034276
Hexachlorocyclopentadiene	ND		ug/L	3.20	9.71	1	03/27/08 18:36	SW846 8270C	8034276
Hexachloroethane	ND		ug/L	5.73	9.71	1	03/27/08 18:36	SW846 8270C	8034276
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.971	9.71	1	03/27/08 18:36	SW846 8270C	8034276
Isophorone	ND		ug/L	4.56	9.71	1	03/27/08 18:36	SW846 8270C	8034276
2-Methylnaphthalene	ND		ug/L	0.971	9.71	1	03/27/08 18:36	SW846 8270C	8034276
2-Methylphenol	ND		ug/L	3.40	9.71	1	03/27/08 18:36	SW846 8270C	8034276
3/4-Methylphenol	ND		ug/L	4.47	9.71	1	03/27/08 18:36	SW846 8270C	8034276
Naphthalene	ND		ug/L	0.971	9.71	1	03/27/08 18:36	SW846 8270C	8034276
3-Nitroaniline	ND		ug/L	3.20	24.3	1	03/27/08 18:36	SW846 8270C	8034276
2-Nitroaniline	ND		ug/L	3.20	24.3	1	03/27/08 18:36	SW846 8270C	8034276
4-Nitroaniline	ND		ug/L	3.20	24.3	1	03/27/08 18:36	SW846 8270C	8034276
Nitrobenzene	ND		ug/L	3.40	9.71	1	03/27/08 18:36	SW846 8270C	8034276
4-Nitrophenol	ND		ug/L	4.17	24.3	1	03/27/08 18:36	SW846 8270C	8034276
2-Nitrophenol	ND		ug/L	3.11	9.71	1	03/27/08 18:36	SW846 8270C	8034276
N-Nitrosodiphenylamine	ND		ug/L	3.20	9.71	1	03/27/08 18:36	SW846 8270C	8034276
N-Nitrosodi-n-propylamine	ND		ug/L	3.79	9.71	1	03/27/08 18:36	SW846 8270C	8034276
Pentachlorophenol	ND	UJ	ug/L	3.20	24.3	1	03/27/08 18:36	SW846 8270C	8034276
Phenanthrene	ND	U	ug/L	0.971	9.71	1	03/27/08 18:36	SW846 8270C	8034276
Phenol	ND		ug/L	3.20	9.71	1	03/27/08 18:36	SW846 8270C	8034276
Pyrene	ND		ug/L	0.971	9.71	1	03/27/08 18:36	SW846 8270C	8034276
1,2,4-Trichlorobenzene	ND		ug/L	4.17	9.71	1	03/27/08 18:36	SW846 8270C	8034276
1-Methylnaphthalene	ND	UJ	ug/L	0.971	9.71	1	03/27/08 18:36	SW846 8270C	8034276
2,4,6-Trichlorophenol	ND	U	ug/L	3.20	9.71	1	03/27/08 18:36	SW846 8270C	8034276
2,4,5-Trichlorophenol	ND	U	ug/L	3.20	24.3	1	03/27/08 18:36	SW846 8270C	8034276
Surr: Terphenyl-d14 (21-123%)	*58 %*					*1*	*03/27/08 18:36*	*SW846 8270C*	*8034276*
Surr: 2,4,6-Tribromophenol (23-129%)	*68 %*					*1*	*03/27/08 18:36*	*SW846 8270C*	*8034276*
Surr: Phenol-d5 (10-100%)	*22 %*					*1*	*03/27/08 18:36*	*SW846 8270C*	*8034276*
Surr: 2-Fluorobiphenyl (34-108%)	*60 %*					*1*	*03/27/08 18:36*	*SW846 8270C*	*8034276*
Surr: 2-Fluorophenol (10-100%)	*36 %*					*1*	*03/27/08 18:36*	*SW846 8270C*	*8034276*
Surr: Nitrobenzene-d5 (29-116%)	*55 %*					*1*	*03/27/08 18:36*	*SW846 8270C*	*8034276*
Extractable Petroleum Hydrocarbons									
Extractable Petroleum Hydrocarbons (EPH)	195		ug/L	76.9	96.2	1	03/28/08 00:28	TDHE	8034272
Surr: o-Terphenyl (50-150%)	*79 %*					*1*	*03/28/08 00:28*	*TDHE*	*8034272*
Purgeable Petroleum Hydrocarbons									
GRO (C6-C10) TN	ND	U	ug/L	10.0	100	1	03/27/08 14:56	TN GRO TDEC	8034270
Surr: a,a,a-Trifluorotoluene (46-150%)	*93 %*					*1*	*03/27/08 14:56*	*TN GRO TDEC*	*8034270*

05/14/08

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

Client	Tetra Tech EMI (7797)	Work Order:	NRC2342
	1955 Evergreen Blvd., Building 200, Suite 300	Project Name:	Oliver Springs Oil Well ER
	Duluth, GA 30096	Project Number:	Oliver Springs Oil Well ER
Attn	Jessica Vickers	Received:	03/27/08 13:21

ANALYTICAL REPORT

Sample ID: NRC2342-03 (TB-02 - Water) Sampled: 03/26/08 16:10

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Acetone	~~ND~~	R UJ	ug/L	25.0	50.0	1	03/27/08 16:01	SW846 8260B	8034281
Benzene	ND		ug/L	0.270	1.00	1	03/27/08 16:01	SW846 8260B	8034281
Bromobenzene	ND		ug/L	0.360	1.00	1	03/27/08 16:01	SW846 8260B	8034281
Bromochloromethane	ND		ug/L	0.400	1.00	1	03/27/08 16:01	SW846 8260B	8034281
Bromodichloromethane	ND		ug/L	0.350	1.00	1	03/27/08 16:01	SW846 8260B	8034281
Bromoform	ND		ug/L	0.430	1.00	1	03/27/08 16:01	SW846 8260B	8034281
Bromomethane	ND	R	ug/L	0.420	1.00	1	03/27/08 16:01	SW846 8260B	8034281
2-Butanone	~~ND~~	R	ug/L	2.40	50.0	1	03/27/08 16:01	SW846 8260B	8034281
sec-Butylbenzene	ND		ug/L	0.140	1.00	1	03/27/08 16:01	SW846 8260B	8034281
n-Butylbenzene	ND		ug/L	0.280	1.00	1	03/27/08 16:01	SW846 8260B	8034281
tert-Butylbenzene	ND		ug/L	0.330	1.00	1	03/27/08 16:01	SW846 8260B	8034281
Carbon disulfide	ND		ug/L	0.380	1.00	1	03/27/08 16:01	SW846 8260B	8034281
Carbon Tetrachloride	ND		ug/L	0.350	1.00	1	03/27/08 16:01	SW846 8260B	8034281
Chlorobenzene	ND		ug/L	0.180	1.00	1	03/27/08 16:01	SW846 8260B	8034281
Chlorodibromomethane	ND		ug/L	0.280	1.00	1	03/27/08 16:01	SW846 8260B	8034281
Chloroethane	ND		ug/L	0.450	1.00	1	03/27/08 16:01	SW846 8260B	8034281
Chloroform	0.790	J	ug/L	0.280	1.00	1	03/27/08 16:01	SW846 8260B	8034281
Chloromethane	ND	U	ug/L	0.380	1.00	1	03/27/08 16:01	SW846 8260B	8034281
2-Chlorotoluene	ND		ug/L	0.300	1.00	1	03/27/08 16:01	SW846 8260B	8034281
4-Chlorotoluene	ND		ug/L	0.330	1.00	1	03/27/08 16:01	SW846 8260B	8034281
1,2-Dibromo-3-chloropropane	ND		ug/L	0.860	5.00	1	03/27/08 16:01	SW846 8260B	8034281
1,2-Dibromoethane (EDB)	ND		ug/L	0.390	1.00	1	03/27/08 16:01	SW846 8260B	8034281
Dibromomethane	ND		ug/L	0.350	1.00	1	03/27/08 16:01	SW846 8260B	8034281
1,4-Dichlorobenzene	ND		ug/L	0.380	1.00	1	03/27/08 16:01	SW846 8260B	8034281
1,3-Dichlorobenzene	ND		ug/L	0.350	1.00	1	03/27/08 16:01	SW846 8260B	8034281
1,2-Dichlorobenzene	ND		ug/L	0.500	1.00	1	03/27/08 16:01	SW846 8260B	8034281
Dichlorodifluoromethane	ND	UJ	ug/L	0.460	1.00	1	03/27/08 16:01	SW846 8260B	8034281
1,1-Dichloroethane	ND		ug/L	0.540	1.00	1	03/27/08 16:01	SW846 8260B	8034281
1,2-Dichloroethane	ND		ug/L	0.370	1.00	1	03/27/08 16:01	SW846 8260B	8034281
cis-1,2-Dichloroethene	ND		ug/L	0.390	1.00	1	03/27/08 16:01	SW846 8260B	8034281
1,1-Dichloroethene	ND		ug/L	0.340	1.00	1	03/27/08 16:01	SW846 8260B	8034281
trans-1,2-Dichloroethene	ND		ug/L	0.470	1.00	1	03/27/08 16:01	SW846 8260B	8034281
1,3-Dichloropropane	ND		ug/L	0.290	1.00	1	03/27/08 16:01	SW846 8260B	8034281
1,2-Dichloropropane	ND		ug/L	0.320	1.00	1	03/27/08 16:01	SW846 8260B	8034281
2,2-Dichloropropane	ND		ug/L	0.420	1.00	1	03/27/08 16:01	SW846 8260B	8034281
cis-1,3-Dichloropropene	ND		ug/L	0.290	1.00	1	03/27/08 16:01	SW846 8260B	8034281
trans-1,3-Dichloropropene	ND		ug/L	0.330	1.00	1	03/27/08 16:01	SW846 8260B	8034281
1,1-Dichloropropene	ND		ug/L	0.310	1.00	1	03/27/08 16:01	SW846 8260B	8034281
Ethylbenzene	ND		ug/L	0.240	1.00	1	03/27/08 16:01	SW846 8260B	8034281
Hexachlorobutadiene	ND		ug/L	0.910	1.00	1	03/27/08 16:01	SW846 8260B	8034281
2-Hexanone	ND		ug/L	16.7	50.0	1	03/27/08 16:01	SW846 8260B	8034281
Isopropylbenzene	ND		ug/L	0.300	1.00	1	03/27/08 16:01	SW846 8260B	8034281
p-Isopropyltoluene	ND		ug/L	0.220	1.00	1	03/27/08 16:01	SW846 8260B	8034281
Methyl tert-Butyl Ether	ND		ug/L	0.420	1.00	1	03/27/08 16:01	SW846 8260B	8034281
Methylene Chloride	ND	UJ	ug/L	0.830	5.00	1	03/27/08 16:01	SW846 8260B	8034281

05/14/08

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

Client Tetra Tech EMI (7797)
1955 Evergreen Blvd., Building 200, Suite 300
Duluth, GA 30096
Attn Jessica Vickers

Work Order: NRC2342
Project Name: Oliver Springs Oil Well ER
Project Number: Oliver Springs Oil Well ER
Received: 03/27/08 13:21

ANALYTICAL REPORT

Sample ID: NRC2342-03 (TB-02 - Water) - cont. Sampled: 03/26/08 16:10

Volatile Organic Compounds by EPA Method 8260B - cont.

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
4-Methyl-2-pentanone	ND	U	ug/L	3.49	10.0	1	03/27/08 16:01	SW846 8260B	8034281
Naphthalene	ND		ug/L	0.540	5.00	1	03/27/08 16:01	SW846 8260B	8034281
n-Propylbenzene	ND		ug/L	0.290	1.00	1	03/27/08 16:01	SW846 8260B	8034281
Styrene	ND		ug/L	0.330	1.00	1	03/27/08 16:01	SW846 8260B	8034281
1,1,1,2-Tetrachloroethane	ND		ug/L	0.290	1.00	1	03/27/08 16:01	SW846 8260B	8034281
1,1,2,2-Tetrachloroethane	ND		ug/L	0.290	1.00	1	03/27/08 16:01	SW846 8260B	8034281
Tetrachloroethene	ND		ug/L	0.230	1.00	1	03/27/08 16:01	SW846 8260B	8034281
Toluene	ND		ug/L	0.280	1.00	1	03/27/08 16:01	SW846 8260B	8034281
1,2,3-Trichlorobenzene	ND		ug/L	0.940	1.00	1	03/27/08 16:01	SW846 8260B	8034281
1,2,4-Trichlorobenzene	ND		ug/L	0.500	1.00	1	03/27/08 16:01	SW846 8260B	8034281
1,1,2-Trichloroethane	ND		ug/L	0.400	1.00	1	03/27/08 16:01	SW846 8260B	8034281
1,1,1-Trichloroethane	ND		ug/L	0.370	1.00	1	03/27/08 16:01	SW846 8260B	8034281
Trichloroethene	ND		ug/L	0.230	1.00	1	03/27/08 16:01	SW846 8260B	8034281
Trichlorofluoromethane	ND		ug/L	0.350	1.00	1	03/27/08 16:01	SW846 8260B	8034281
1,2,3-Trichloropropane	ND		ug/L	0.290	1.00	1	03/27/08 16:01	SW846 8260B	8034281
1,3,5-Trimethylbenzene	ND		ug/L	0.160	1.00	1	03/27/08 16:01	SW846 8260B	8034281
1,2,4-Trimethylbenzene	ND		ug/L	0.170	1.00	1	03/27/08 16:01	SW846 8260B	8034281
Vinyl chloride	ND		ug/L	0.290	1.00	1	03/27/08 16:01	SW846 8260B	8034281
Xylenes, total	ND		ug/L	0.860	3.00	1	03/27/08 16:01	SW846 8260B	8034281
Surr: 1,2-Dichloroethane-d4 (60-140%)	*95 %*					*1*	*03/27/08 16:01*	*SW846 8260B*	*8034281*
Surr: Dibromofluoromethane (75-124%)	*86 %*					*1*	*03/27/08 16:01*	*SW846 8260B*	*8034281*
Surr: Toluene-d8 (78-121%)	*93 %*					*1*	*03/27/08 16:01*	*SW846 8260B*	*8034281*
Surr: 4-Bromofluorobenzene (79-124%)	*98 %*					*1*	*03/27/08 16:01*	*SW846 8260B*	*8034281*

05/14/08

ENCLOSURE 2

DATA VALIDATION-QUALIFIED FIXED LABORATORY ANALYTICAL RESULTS FOR TESTAMERICA ANALYTICAL TESTING CORPORATION REPORTS NO. NRC1932 AND NRC2342

(Five Pages)

DATA VALIDATION-QUALIFIED FIXED LABORATORY ANALYTICAL RESULTS FOR TESTAMERICA ANALYTICAL TESTING CORPORATION REPORT NO. NRC1932

Sample Designation:	**SW-01**	**SW-02**	**SW-03**	**TB-01**
Sample Collection Date:	**3/21/2008**	**3/21/2008**	**3/21/2008**	**3/21/2008**
Description:	**Downstream**	**Downstream**	**Upstream**	**Trip Blank**
Gasoline Range Organics (GRO) (µg/L)				
GRO (C6-C10) TN	100 UJ	100 UJ	100 UJ	100 UJ
Extractable Petroleum Hydrocarbons (EPH) (µg/L)				
Extractable Petroleum Hydrocarbons (EPH)	**685**	**663**	**164**	NA

Notes:

µg/L = Micrograms per liter

UJ = The analyte was analyzed for, but was not detected at or above the associated value, which is considered approximate due to deficiencies in one or more quality control criteria.

NA = The sample was not analyzed for this analyte.

DATA VALIDATION-QUALIFIED FIXED LABORATORY ANALYTICAL RESULTS FOR TESTAMERICA ANALYTICAL TESTING CORPORATION REPORT NO. NRC2342

Sample Designation:	SW-04	SW-05	TB-02
Sample Collection Date:	3/26/2008	3/26/2008	3/26/2008
Description:			Trip Blank
Volatile Organic Compounds (µg/L)			
1,1,1,2-Tetrachloroethane	1.00 U	1.00 U	1.00 U
1,1,1-Trichloroethane	1.00 U	1.00 U	1.00 U
1,1,2,2-Tetrachloroethane	1.00 U	1.00 U	1.00 U
1,1,2-Trichloroethane	1.00 U	1.00 U	1.00 U
1,1-Dichloroethane	1.00 U	1.00 U	1.00 U
1,1-Dichloroethene	1.00 U	1.00 U	1.00 U
1,1-Dichloropropene	1.00 U	1.00 U	1.00 U
1,2,3-Trichlorobenzene	1.00 U	1.00 U	1.00 U
1,2,3-Trichloropropane	1.00 U	1.00 U	1.00 U
1,2,4-Trichlorobenzene	1.00 U	1.00 U	1.00 U
1,2,4-Trimethylbenzene	1.00 U	1.00 U	1.00 U
1,2-Dibromo-3-chloropropane	5.00 U	5.00 U	5.00 U
1,2-Dibromoethane (EDB)	1.00 U	1.00 U	1.00 U
1,2-Dichlorobenzene	1.00 U	1.00 U	1.00 U
1,2-Dichloroethane	1.00 U	1.00 U	1.00 U
1,2-Dichloropropane	1.00 U	1.00 U	1.00 U
1,3,5-Trimethylbenzene	1.00 U	1.00 U	1.00 U
1,3-Dichlorobenzene	1.00 U	1.00 U	1.00 U
1,3-Dichloropropane	1.00 U	1.00 U	1.00 U
1,4-Dichlorobenzene	1.00 U	1.00 U	1.00 U
2,2-Dichloropropane	1.00 U	1.00 U	1.00 U
2-Butanone	50.0 U	50.0 U	50.0 U
2-Chlorotoluene	1.00 U	1.00 U	1.00 U
2-Hexanone	50.0 U	50.0 U	50.0 U
4-Chlorotoluene	1.00 U	1.00 U	1.00 U
4-Methyl-2-pentanone	10.0 U	10.0 U	10.0 U
Acetone	50.0 U	50.0 U	50.0 U
Benzene	1.00 U	1.00 U	1.00 U
Bromobenzene	1.00 U	1.00 U	1.00 U
Bromochloromethane	1.00 U	1.00 U	1.00 U
Bromodichloromethane	1.00 U	1.00 U	1.00 U
Bromoform	1.00 U	1.00 U	1.00 U
Bromomethane	1.00 U	1.00 U	1.00 U
Carbon disulfide	1.00 U	1.00 U	1.00 U
Carbon Tetrachloride	1.00 U	1.00 U	1.00 U
Chlorobenzene	1.00 U	1.00 U	1.00 U
Chlorodibromomethane	1.00 U	1.00 U	1.00 U
Chloroethane	1.00 UJ	1.00 U	1.00 U
Chloroform	1.00 U	1.00 U	**0.790 J**
Chloromethane	1.00 UJ	1.00 U	1.00 U
cis-1,2-Dichloroethene	1.00 U	1.00 U	1.00 U
cis-1,3-Dichloropropene	1.00 U	1.00 U	1.00 U
Dibromomethane	1.00 U	1.00 U	1.00 U
Dichlorodifluoromethane	1.00 UJ	1.00 U	1.00 U
Ethylbenzene	1.00 U	1.00 U	1.00 U
Hexachlorobutadiene	1.00 U	1.00 U	1.00 U

DATA VALIDATION-QUALIFIED FIXED LABORATORY ANALYTICAL RESULTS FOR TESTAMERICA ANALYTICAL TESTING CORPORATION REPORT NO. NRC2342

Sample Designation:	SW-04	SW-05	TB-02
Sample Collection Date:	3/26/2008	3/26/2008	3/26/2008
Description:			Trip Blank
Volatile Organic Compounds (µg/L) (cont'd)			
Isopropylbenzene	1.00 U	1.00 U	1.00 U
Methyl tert-Butyl Ether	1.00 U	1.00 U	1.00 U
Methylene Chloride	5.00 UJ	5.00 UJ	5.00 UJ
Naphthalene	5.00 U	5.00 U	5.00 U
n-Butylbenzene	1.00 U	1.00 U	1.00 U
n-Propylbenzene	1.00 U	1.00 U	1.00 U
p-Isopropyltoluene	1.00 U	1.00 U	1.00 U
sec-Butylbenzene	1.00 U	1.00 U	1.00 U
Styrene	1.00 U	1.00 U	1.00 U
tert-Butylbenzene	1.00 U	1.00 U	1.00 U
Tetrachloroethene	1.00 U	1.00 U	1.00 U
Toluene	1.00 U	1.00 U	1.00 U
trans-1,2-Dichloroethene	1.00 U	1.00 U	1.00 U
trans-1,3-Dichloropropene	1.00 U	1.00 U	1.00 U
Trichloroethene	1.00 U	1.00 U	1.00 U
Trichlorofluoromethane	1.00 UJ	1.00 U	1.00 U
Vinyl chloride	1.00 UJ	1.00 U	1.00 U
Xylenes, total	3.00 U	3.00 U	3.00 U
Semivolatile Organic Compounds (µg/L)			
1,2,4-Trichlorobenzene	9.71 U	9.71 U	NA
1,2-Dichlorobenzene	9.71 U	9.71 U	NA
1,3-Dichlorobenzene	9.71 U	9.71 U	NA
1,4-Dichlorobenzene	9.71 U	9.71 U	NA
1-Methylnaphthalene	9.71 UJ	9.71 UJ	NA
2,4,5-Trichlorophenol	24.3 U	24.3 U	NA
2,4,6-Trichlorophenol	9.71 U	9.71 U	NA
2,4-Dichlorophenol	9.71 U	9.71 U	NA
2,4-Dimethylphenol	9.71 U	9.71 U	NA
2,4-Dinitrophenol	24.3 U	24.3 U	NA
2,4-Dinitrotoluene	9.71 U	9.71 U	NA
2,6-Dinitrotoluene	9.71 U	9.71 U	NA
2-Chloronaphthalene	9.71 U	9.71 U	NA
2-Chlorophenol	9.71 U	9.71 U	NA
2-Methylnaphthalene	9.71 U	9.71 U	NA
2-Methylphenol	9.71 U	9.71 U	NA
2-Nitroaniline	24.3 U	24.3 U	NA
2-Nitrophenol	9.71 U	9.71 U	NA
3,3-Dichlorobenzidine	9.71 U	9.71 U	NA
3/4-Methylphenol	9.71 U	9.71 U	NA
3-Nitroaniline	24.3 U	24.3 U	NA
4,6-Dinitro-2-methylphenol	24.3 U	24.3 U	NA
4-Bromophenyl phenyl ether	9.71 U	9.71 U	NA
4-Chloro-3-methylphenol	9.71 U	9.71 U	NA
4-Chloroaniline	9.71 U	9.71 U	NA
4-Chlorophenyl phenyl ether	9.71 U	9.71 U	NA
4-Nitroaniline	24.3 U	24.3 U	NA

DATA VALIDATION-QUALIFIED FIXED LABORATORY ANALYTICAL RESULTS FOR TESTAMERICA ANALYTICAL TESTING CORPORATION REPORT NO. NRC2342

Sample Designation:	**SW-04**	**SW-05**	**TB-02**
Sample Collection Date:	**3/26/2008**	**3/26/2008**	**3/26/2008**
Description:			**Trip Blank**
Semivolatile Organic Compounds (µg/L) (cont'd)			
4-Nitrophenol	24.3 U	24.3 U	NA
Acenaphthene	9.71 U	9.71 U	NA
Acenaphthylene	9.71 U	9.71 U	NA
Anthracene	9.71 U	9.71 U	NA
Benzo (a) anthracene	9.71 U	9.71 U	NA
Benzo (a) pyrene	9.71 U	9.71 U	NA
Benzo (b) fluoranthene	9.71 U	9.71 U	NA
Benzo (g,h,i) perylene	9.71 U	9.71 U	NA
Benzo (k) fluoranthene	9.71 U	9.71 U	NA
Bis(2-chloroethoxy)methane	9.71 U	9.71 U	NA
Bis(2-chloroethyl)ether	9.71 U	9.71 U	NA
Bis(2-chloroisopropyl)ether	9.71 U	9.71 U	NA
Bis(2-ethylhexyl)phthalate	9.71 U	9.71 U	NA
Butyl benzyl phthalate	9.71 U	9.71 U	NA
Carbazole	9.71 U	9.71 U	NA
Chrysene	9.71 U	9.71 U	NA
Dibenz (a,h) anthracene	9.71 U	9.71 U	NA
Dibenzofuran	9.71 U	9.71 U	NA
Diethyl phthalate	9.71 U	9.71 U	NA
Dimethyl phthalate	9.71 U	9.71 U	NA
Di-n-butyl phthalate	9.71 U	9.71 U	NA
Di-n-octyl phthalate	9.71 U	9.71 U	NA
Fluoranthene	9.71 U	9.71 U	NA
Fluorene	9.71 U	9.71 U	NA
Hexachlorobenzene	9.71 U	9.71 U	NA
Hexachlorobutadiene	9.71 U	9.71 U	NA
Hexachlorocyclopentadiene	9.71 U	9.71 U	NA
Hexachloroethane	9.71 U	9.71 U	NA
Indeno (1,2,3-cd) pyrene	9.71 U	9.71 U	NA
Isophorone	9.71 U	9.71 U	NA
Naphthalene	9.71 U	9.71 U	NA
Nitrobenzene	9.71 U	9.71 U	NA
N-Nitrosodi-n-propylamine	9.71 U	9.71 U	NA
N-Nitrosodiphenylamine	9.71 U	9.71 U	NA
Pentachlorophenol	24.3 UJ	24.3 UJ	NA
Phenanthrene	9.71 U	9.71 U	NA
Phenol	9.71 U	9.71 U	NA
Pyrene	9.71 U	9.71 U	NA
Gasoline Range Organics (GRO) (µg/L)			
GRO (C6-C10) TN	100 U	100 U	NA
Extractable Petroleum Hydrocarbons (EPH) (µg/L)			
Extractable Petroleum Hydrocarbons (EPH)	**189**	**195**	NA
Metals (mg/L)			
Aluminum	0.100 U	**0.143**	NA
Antimony	0.0100 U	0.0100 U	NA
Arsenic	0.0100 U	0.0100 U	NA

DATA VALIDATION-QUALIFIED FIXED LABORATORY ANALYTICAL RESULTS FOR TESTAMERICA ANALYTICAL TESTING CORPORATION REPORT NO. NRC2342

Sample Designation:	**SW-04**	**SW-05**	**TB-02**
Sample Collection Date:	**3/26/2008**	**3/26/2008**	**3/26/2008**
Description:			**Trip Blank**
Metals (mg/L) (cont'd)			
Barium	**0.0372**	**0.0387**	NA
Beryllium	0.00400 U	0.00400 U	NA
Cadmium	0.00100 U	0.00100 U	NA
Calcium	**10.7**	**11.1**	NA
Chromium	0.00500 U	0.00500 U	NA
Cobalt	0.0200 U	0.0200 U	NA
Copper	0.0100 U	0.0100 U	NA
Iron	**0.236**	**0.236**	NA
Lead	0.00500 U	0.00500 U	NA
Magnesium	**5.29**	**5.26**	NA
Manganese	**0.0291**	**0.0154**	NA
Mercury	**0.000114 J**	0.000200 U	NA
Nickel	0.0100 U	0.0100 U	NA
Potassium	**1.03**	**1.05**	NA
Selenium	0.0100 U	0.0100 U	NA
Silver	0.00500 U	0.00500 U	NA
Sodium	**4.62**	**5.00**	NA
Thallium	0.0100 U	0.0100 U	NA
Vanadium	0.0200 U	0.0200 U	NA
Zinc	0.0500 U	0.0500 U	NA

Notes:

mg/L = Milligrams per liter

µg/L = Micrograms per liter

J = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.

R = The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.

U = The analyte was analyzed for, but was not detected at or above the associated value.

UJ = The analyte was analyzed for, but was not detected at or above the associated value, which is considered approximate due to deficiencies in one or more quality control criteria.

NA = The sample was not analyzed for this analyte.